

### **Abstract**

A system for remotely monitoring and controlling devices. A software-based protocol converter converts asynchronous serial control and data signals from a host application computer program to Internet Protocol ("IP") packet-switched signals. The converted signals are transmitted to a remote device, such as a meter or a valve, by means of a packet-switching network. The received IP packet-switching signals are converted by a hardware-based protocol converter into asynchronous serial control and data signals compatible with the remote device. The hardware-based protocol converter is also capable of converting asynchronous serial data feedback signals from the remote device to IP packet-switching signals and transmitting them to the host application computer program via the packet-switching network. The feedback signals are converted to asynchronous serial data signals compatible with the host application computer program by the software-based protocol converter.